

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P974381

Luminaire Tested: FLR2-24-45-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974381
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-45-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L940-CA080
Ballast/Driver: -

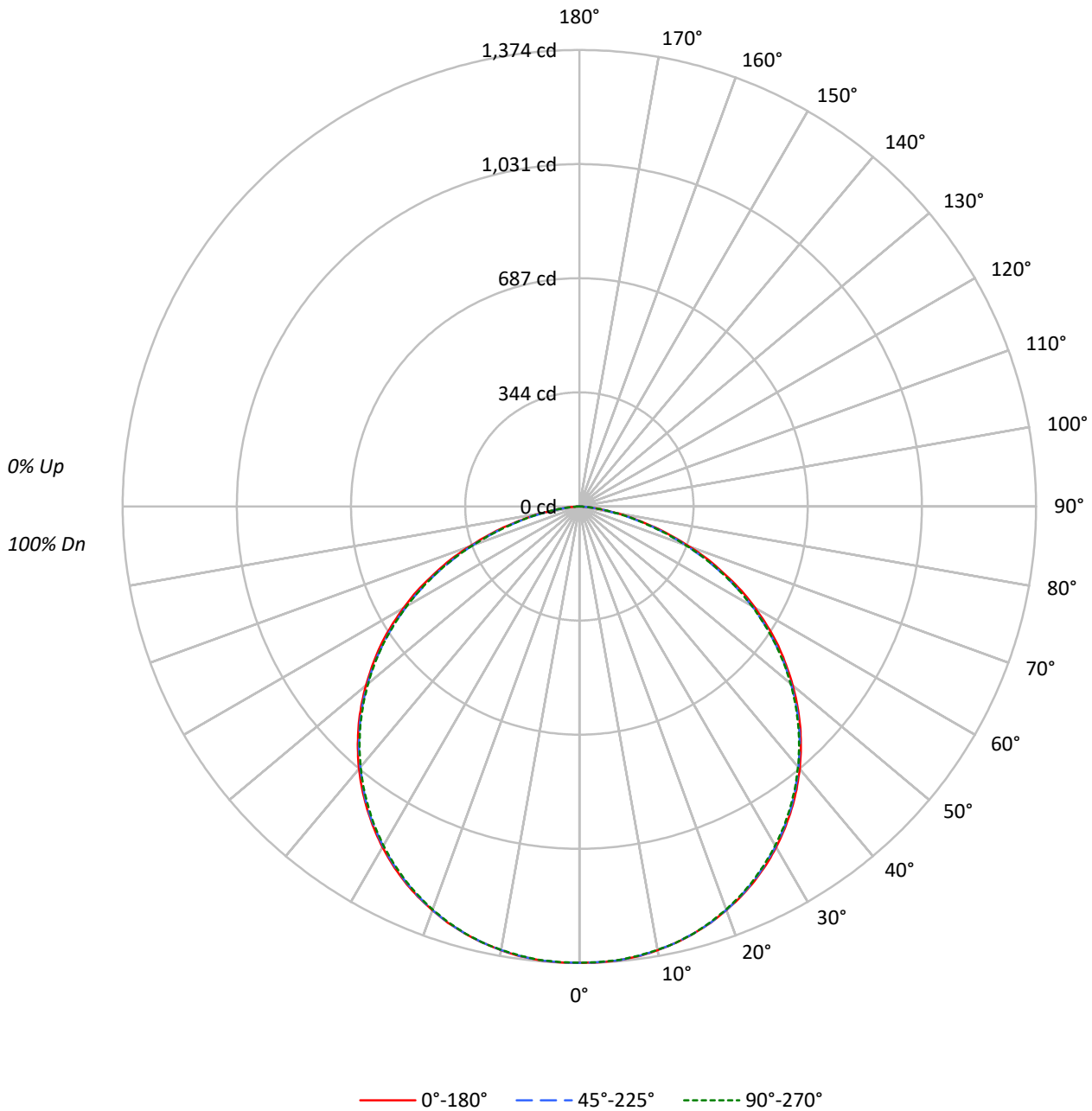
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3882.3 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor:
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1848	1848	1848
5°	1852	1852	1851
10°	1853	1852	1852
15°	1854	1853	1853
20°	1852	1851	1848
25°	1848	1845	1842
30°	1840	1835	1831
35°	1828	1823	1817
40°	1812	1801	1798
45°	1788	1778	1772
50°	1755	1742	1736
55°	1713	1689	1687
60°	1642	1613	1613
65°	1536	1500	1505
70°	1382	1340	1336
75°	1161	1115	1109
80°	848	806	840
85°	480	442	449

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1788 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	3.4
10°-20°	375.6	9.7
20°-30°	572.7	14.8
30°-40°	693.9	17.9
40°-50°	720.7	18.6
50°-60°	644.8	16.6
60°-70°	469.9	12.1
70°-80°	232.7	6.0
80°-90°	41.6	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1078.7	27.8
0°-40°	1772.6	45.7
0°-60°	3138.1	80.8
0°-90°	3882.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3882.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1374	1374	1374	1374	1374	
5°	1371	1372	1371	1371	1370	130
15°	1331	1330	1330	1331	1330	376
25°	1245	1244	1242	1242	1241	574
35°	1113	1111	1110	1108	1106	696
45°	940	938	934	932	932	724
55°	730	725	720	720	719	651
65°	482	479	471	473	473	478
75°	223	220	214	218	213	238
85°	31	29	29	29	29	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1373.6	1373.6	1373.6	1373.6	1373.6
2.5°	1373.6	1373.1	1373.1	1373.6	1372.6
5°	1371.2	1371.7	1371.2	1371.2	1370.2
7.5°	1365.7	1365.3	1364.8	1365.3	1363.8
10°	1356.4	1356.4	1355.9	1356.4	1355.4
12.5°	1345.0	1345.0	1345.0	1345.5	1345.0
15°	1330.8	1330.3	1330.3	1331.2	1330.3
17.5°	1314.0	1313.5	1313.5	1313.0	1312.0
20°	1293.3	1293.3	1292.8	1292.3	1290.8
22.5°	1271.1	1270.6	1269.1	1269.1	1267.2
25°	1245.0	1243.5	1242.5	1242.0	1240.6
27.5°	1216.4	1214.4	1213.0	1212.0	1210.5
30°	1184.4	1182.4	1180.9	1179.4	1178.5
32.5°	1149.9	1148.9	1146.4	1145.9	1144.0
35°	1112.9	1111.4	1109.9	1108.0	1106.0
37.5°	1073.5	1072.0	1068.5	1067.6	1066.1
40°	1031.6	1029.6	1025.2	1025.2	1023.7
42.5°	986.7	984.8	981.8	979.8	978.8
45°	939.9	937.9	934.5	932.5	931.5
47.5°	890.1	888.6	884.7	883.2	881.7
50°	838.4	836.4	832.0	831.0	829.5
52.5°	784.2	783.2	777.3	776.8	775.3
55°	730.4	725.0	720.1	720.1	719.1
57.5°	671.3	667.3	660.9	660.9	660.0
60°	610.2	606.7	599.3	600.3	599.3
62.5°	550.5	543.1	536.2	539.2	536.7
65°	482.5	478.6	471.2	473.2	472.7
67.5°	420.4	413.0	406.1	410.1	408.1
70°	351.4	347.5	340.6	344.5	339.6
72.5°	286.4	282.9	276.0	280.4	275.5
75°	223.3	219.8	214.4	218.3	213.4
77.5°	163.6	161.2	156.2	160.2	161.2
80°	109.4	106.5	104.0	107.4	108.4
82.5°	64.1	62.1	61.1	61.6	64.1
85°	31.1	28.6	28.6	29.1	29.1
87.5°	8.4	7.4	8.4	8.9	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)